

## MATRIX PROGRAM CHARTER

### FOR

### NOAA's EMERGENCY RESPONSE PROGRAM

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#### 1. EXECUTIVE SUMMARY

Every year NOAA responds to over a thousand natural and human-induced incidents threatening life, property, and trust resources. Federal, State, and local agencies across the country call on and rely on NOAA support in wildfires; oil and chemical spills; marine mammal strandings, entanglements, and unusual mortality events; vessel groundings; search and rescue (vessel, aircraft, and limited personal); hazards to navigation and coastal areas; Harmful Algal Blooms; national special security events; coral disease/bleaching events; natural resource damage assessment; and other emergencies. Our expertise is critical to prevent further harm, restore adverse effects on natural resources, aid planning and response decision-making, and document damages. To provide the required prevention, preparedness, response, and recovery actions associated with these events, NOAA has established an Emergency Response Program (EMR or the Program) as the functional home for the specific capabilities and needs of on-scene responders across the agency. While EMR is housed under NOAA's Commerce and Transportation Goal, it supports Weather and Water and Ecosystem Goal outcomes as well. The Program activities occur nationwide with an emphasis in coastal areas. More information can be found at <http://response.restoration.noaa.gov>, and <http://www.sarsat.noaa.gov>.

#### 2. PROGRAM REQUIREMENTS

##### A. Requirement Drivers:

The following legislation, agreements, and mandates comprise the primary requirement drivers for the program. A full list of requirement drivers is contained in Appendix A. (The numbers do not represent a priority ranking.)

1. **National Response Plan** (DHS, December 2004, signed by 32 Federal agencies and other entities): Tasks the Department of Commerce and NOAA with acquiring and disseminating weather data, forecasts, and emergency information; providing scientific advice and response to hazardous materials releases; protecting natural and cultural resources and historic properties resources prior to, during, and/or after an Incident of National Significance; providing overall support regarding weather services during disasters and airborne plume prediction; and public dissemination of critical pre-event and post-event information.

2. **National Oil and Hazardous Substances Pollution Contingency Plan** (Sec 300.175(b)(7), Sec 300.145(c)(1-4)): Provides the organizational structure and procedures for preparing for and responding to discharges of oil and releases of hazardous substances, pollutants, and contaminants. Names DOC (i.e., NOAA) as the lead federal trustee for ocean and coastal natural resources. Tasks NOAA to provide scientific support to the Federal On-Scene Coordinator through the Scientific Support Coordinator program.
3. **National Search and Rescue Plan** (January 1999, DOT, DOD, FCC, DOC, DOI and NASA): Tasks the Department to provide satellite services for detecting and locating aircraft, ships or individuals in potential or actual distress.
4. **Interagency Agreement for Meteorological Services among the Bureau of Land Management, Bureau of Indian Affairs, U.S. Fish and Wildlife Service, and National Park Service of the U. S. Dept. of the Interior; the Forest Service of the U.S. Dept. of Agriculture; and the NWS of the U. S. Dept. of Commerce:** Sets the terms and conditions under which NOAA's National Weather Service will provide meteorological services to Wildland Fire Agencies.
5. **National Marine Sanctuaries Act (16 U.S.C. §§ 1431 et seq.):** Under section 1443, the Secretary may undertake or authorize all necessary actions to prevent or minimize the destruction or loss of, or injury to, sanctuary resources, or to minimize the imminent risk of such destruction, loss, or injury.
6. **Coast & Geodetic Survey Act of 1947 (33 U.S.C. §§ 883 et seq.):** Organic authority for NOAA "to provide charts and related information for the safe navigation of marine and air commerce, and to provide basic data for engineering and scientific purposes... NOAA is authorized to conduct the following activities: hydrographic and topographic surveys, tide and current observations, geodetic and control surveys, field surveys for aeronautical charts,...to provide charts and other information for safe marine and air navigation."
7. **Marine Mammal Protection Act of 1972 (16 U.S.C. §§ 1361 et seq.):** Under Title IV of the Marine Mammal Protection Act of 1972, NOAA is required to have a Marine Mammal Health and Stranding Response Program.
8. **Harmful Algal Bloom (HAB) and Hypoxia Research and Control Act (16 U.S.C. § 1451 note):** gives NOAA and a NOAA-chaired task force responsibility for assessing and responding to harmful algal bloom events.
9. **Oil Pollution Act of 1990 (33 U.S.C. §§ 2701 et seq. and scattered), Sections**

**1002, 1006, 1011, 1012, 4202, 7001:** Streamlined and strengthened prevention, preparedness and response to catastrophic oil spills for oil spills that threaten natural resources. NOAA has responsibility for ensuring the protection and restoration of coastal resources injured by releases of hazardous materials and of national marine sanctuary resources injured by physical impacts. Oil pollution research and development is mandated in Subchapter IV.

**10. Occupational Safety and Health Standards- Hazardous waste operations and emergency response (29 CFR 1910.120).** Requires training for all employees working on sites exposed to hazardous substances, health hazards, or safety hazards.

**B. Mission Requirements:**

- Prevention and Preparedness
  - Provide health, safety, and skill training for emergency responders (Requirement Driver #10)
  - Conduct exercises to promote preparedness by testing policies and plans and training personnel (Requirement Drivers #1,2)
  - Conduct research to develop tools and techniques to improve response efficiency, increase scientific accuracy, and decrease harm to life, property, and the environment (Requirement Driver #9)
- Response
  - Provide accurate, timely, and relevant scientific data, information, products, services and advice to organizations charged with responding to and mitigating the consequences of natural and human-induced disasters (Requirement Drivers #1, 2, 4, 5, 6, 7, 8)
  - Provide on-site 24/7 meteorological support to incident commanders and first responders involved in natural and man made hazardous events to ensure the safety of personnel and the affected public, and mitigation of threats to nearby infrastructure (Requirement Driver #4)
  - Detect and locate aviators, mariners and land-based users in distress (Requirement Driver #3)
  - Assess injury to NOAA trust resources and risk to human health and to pursue natural resource damages for the purpose of restoring adverse effects when authorized under the Oil Pollution Act, Superfund, or the National Marine Sanctuaries Act (Requirement Drivers # 2, 5)
- Recovery
  - Provide data and other support to NOAA programs and entities conducting long-term restoration, remediation, and research (Requirement Drivers #2, 5)

**3. LINKS TO THE NOAA STRATEGIC PLAN**

**A. Goal Outcomes**

The Program supports the following NOAA Goal outcomes:

**Commerce & Transportation:**

- Safe, secure, efficient, and seamless movement of goods and people in the U.S. transportation system by providing the environmental information to allow the reopening of waterways and by providing damage assessment aerial imagery to the public after incidents.
- Environmentally sound development and use of the U.S. transportation system by developing environmental sensitivity indices for coastal areas, National Marine Sanctuary area contingency plans, and contributing to national contingency plans

**Weather & Water:**

- Reduced loss of life, injury, and damage to the economy by distributing distress alerts, predicting the fate and transport of hazardous materials, providing site specific forecasts,.
- Better, quicker, and more valuable weather and water information to support improved decisions by integrating weather and hazard response teams and deploying mobile environmental observing systems at incident sites.

**Ecosystems:**

- Healthy and productive coastal and marine ecosystems that benefit society by responding to marine animal strandings and mortality events, providing clean-up expertise and environmental tradeoff guidance for oil, chemical, and other incidents and identifying, monitoring and assessing harmful algal blooms and alerting states and local communities.

**B. Goal Performance Objectives:**

## Commerce &amp; Transportation:

- Reduce human risk as well as economic and environmental consequences resulting from natural or human-induced emergencies

## Weather &amp; Water:

- Improve predictability of the onset, duration, and impact of hazardous and severe weather and water events
- Increase coordination of weather and water information and services with integration of local, regional, and global observation systems

## Ecosystems:

- Increase number of habitat acres conserved or restored
- Increase number of protected species that reach stable or increasing population levels

**C. Goal Strategies:**

## Commerce &amp; Transportation:

- Develop and apply new technologies, methods, and models to increase the capabilities, efficiencies, and accuracy of transportation-related products and services
- Develop and implement sophisticated assessment and prediction techniques, products and services to support decisions on aviation, marine and surface navigation efficiencies; coastal resource management; and transportation system management, operations and planning
- Build public understanding of the science and technology involved and the role of the environment in commerce and transportation through outreach, education and industry collaboration

## Weather &amp; Water:

- Improve the reliability, lead-time, and effectiveness of weather and water information and services that predict changes in environmental conditions.
- Develop and infuse research results and new technologies more efficiently to improve products and services, streamline dissemination, and communicate vital information more effectively
- Work with private industry, universities, and national and international agencies to create and leverage partnerships that foster more effective information services
- Employ scientific and emerging technological capabilities to advance decision-support services and educate stakeholders

## Ecosystems:

- Manage uses of ecosystems by applying scientifically sound observations, assessments, and research findings to ensure the sustainable use of resources and to balance competing uses of coastal and marine ecosystems

#### **4. PROGRAM OUTCOME**

Reduced human, economic, and environmental risk and consequences resulting from natural or human-induced emergencies.

#### **5. PROGRAM ROLES AND RESPONSIBILITIES**

The Program is established and managed with the procedures established in the NOAA Business Operations Manual (BOM). Responsibilities of the Program Manager are described in the BOM. Responsibilities of other major participants are summarized below:

##### **A. Participating Line Office, Staff Office and Council Responsibilities:**

1. NOS is responsible for:
  - Management of the Program and coordination with the Homeland Security Program Office and other programs with shared interests.
  - Providing emergency responders with scientific support and expertise for oil and hazardous materials releases (both aquatic and atmospheric); Harmful Algal Blooms, Coral Reef Disease Die Off and other unusual mortality events; rapid hydrographic surveys to update navigational charts; remote sensing data for damage assessment and to support both nautical and aeronautical navigation safety and other applications; rapid geodetic surveys to support both nautical and aeronautical navigation safety and other applications; on-scene water level, currents, meteorological and other environmental data along with predictions and forecasts in the marine environment.
  - Post incident marine debris surveys, compilation and dissemination of data in an effective and useable format, marine debris risk assessments, and associated outreach activities
2. NESDIS is responsible for:
  - Relaying distress signals to search and rescue services and taking the lead for the COSPAS-SARSAT program in the United States.
  - Providing satellite imagery to responders as requested.
  - Assisting NOS with program management activities.
3. NWS is responsible for:
  - Providing a cadre of specially trained meteorologists for on-scene incident forecast, warning, and response services for wildland fires, environmental hazard events, and land management activities.
  - Providing Warning Coordination Meteorologists as weather focal points as requested.

- Disseminating informational messages associated with specific hazardous events through the use of NOAA All Hazards Radio and other NOAA alert broadcast methods.
4. OAR is responsible for education and outreach to reduce the loss of human life, property, and resources from coastal natural hazards in the United States.
  5. NMFS is responsible for maintaining a Marine Mammal Health and Stranding Response Program for ensuring the protection of cetaceans (whales, porpoises, and dolphins) and pinnipeds (seals and sea lions), sea turtles, and highly managed species stocks.
  6. NMAO is responsible for operating and maintaining a wide variety of specialized aircraft and ships to complete NOAA's environmental and scientific missions and their role in meeting emergency response requirements.
  7. Office of Public and Constituent Affairs is responsible for coordinating media inquiries and advocating story ideas on NOAA's emergency response capabilities. The office is required, along with line offices, to approve press releases.
  8. Office of the General Counsel provides legal review on subjects related to emergency response. The office also coordinates and clears international and interagency agreements and understandings through NOAA, the Department and the State Department.
  9. Office of International Affairs provides policy advice and support with respect to negotiations, partnerships, international disaster response, and other NOAA international interests.
  10. Office of Finance and Administration provides support for procurement activities.
  11. Office of Legislative Affairs acts as liaison with elected representatives and staff.
  12. The program does not have a direct connection with any Council, however, the program's work is relevant to the Ocean Council, Observation Systems Council, and Research Council.

**B. External Agency/Organization Responsibilities (e.g., EPA, Fish and**

**Wildlife Service, state agencies, international partners, private sector organizations):**

- U.S. Coast Guard (USCG) is responsible for on-scene response to maritime hazardous spills and search and rescue incidents.
- United States Air Force is responsible for coordinating aviation and in-land search and rescue incidents.
- United States Army Corps of Engineers is responsible for responding to and mitigating infrastructure damage resulting from natural and manmade disasters and maintaining federal shipping channels.
- National Aeronautics and Space Administration is responsible for researching and developing new technologies to assist emergency response activities.
- U.S. Department of Agriculture, U.S. Forest Service, and U.S. Department of the Interior provide meteorological and other data for use by NOAA responders for wildland fires.
- Environmental Protection Agency (EPA) collaborates on the development, maintenance and training in a suite of software tools that assist local emergency managers, firefighters and HAZMAT teams world-wide.
- Center for Disease Control and Prevention collaborates during oil and chemical incidents by assisting in determining accurate toxicological human health issues.
- Food and Drug Administration regulates the harvest, processing and interstate shipment of molluscan shellfish.
- Department of Homeland Security leads the federal response to Incidents of National Significance and National Special Security Events.
- Land managers provide critical on-site decision support, information, tools and services for wildland fires.
- States/local agencies provide on-site meteorological support for wildland fires and large hazardous spills and releases.

**6. END USERS OR BENEFICIARIES OF PROGRAM:**

- Emergency Responders – the Program provides critical decision support information, tools and services to emergency managers for hazardous materials response, natural hazard (storms, hurricanes, tsunamis), and other events.
- Maritime Commerce – the Program provides critical decision support information, tools and services to shippers, pilots, port authorities, the U.S. Coast Guard, fisherman and others who rely on safe and efficient marine navigation.
- Homeland Security – the Program provides critical decision support information,



tools and services to the Department of Homeland Security in support of the National Incident Management System and National Response Plan.

- Coastal Resource Managers – the Program provides critical decision support information, tools and services to significantly improve federal, state, and local coastal resource managers’ ability to prevent, prepare for, respond, and recover from injuries to natural resources.
- Port Infrastructure (re)Development – the Program provides critical decision support information, tools and services to state and local port infrastructure planners to facilitate (re)development of port infrastructure in an environmentally sound manner.
- General Public – the Program provides information, tools and services to emergency responders and other officials protecting the life and property of the general public
- Academia – the Program awards grants and promotes other collaborative activities to support extramural research and development, particularly with respect to oil spill research and navigation technologies. The Program also provides information critical for a broad range of research issues such as long-term sea level rise.

## Appendix A: Complete list of Program Requirements

1. **National Response Plan** (NRP, December 2004): Tasks the Department of Commerce and NOAA with acquiring and disseminating weather data, forecasts, and emergency information; providing scientific advice and response to hazardous materials releases; protecting natural and cultural resources and historic properties resources prior to, during, and/or after an Incident of National Significance; providing overall support regarding weather services during disasters and airborne plume prediction; and public dissemination of critical pre-event and post-event information.

The National Response Plan includes Emergency Support Function (ESF) Annexes that detail the missions, policies, structures, and responsibilities of Federal agencies for coordinating resource and programmatic support to States, tribes, and other Federal agencies or other jurisdictions and entities during Incidents of National Significance. Under the NRP, NOAA has responsibilities in 5 of the 15 Emergency Support Functions: ESF #2 – Communications Annex; ESF #4 – Firefighting; ESF #10 -Oil and Hazardous Materials Response; ESF #11 -Agriculture and Natural Resources; ESF #13 – Public Safety and Security Annex; and ESF #15 – External Affairs Annex

2. **Oil Pollution Act of 1990 (33 U.S.C. §§ 2701 et seq. and scattered), Sections 1002, 1006, 1011, 1012, 4202, 7001**: Streamlined and strengthened prevention, preparedness and response to catastrophic oil spills for oil spills that threaten natural resources. NOAA has responsibility for ensuring the protection and restoration of coastal resources injured by releases of hazardous materials and of national marine sanctuary resources injured by physical impacts. Oil pollution research and development is mandated in Subchapter IV.
3. **Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. §§ 9601 et seq.), Sections 104, 106**: Establishes the Federal government’s authority to respond to releases or threatened releases of hazardous substances into the environment.
4. **Federal Water Pollution Control Act (33 U.S.C. §§ 1251 et seq.), Section 311**: The Act allows the Federal government to remove hazardous substances and assess the removal costs against the responsible party (CWA section 311(c)).
5. **Homeland Security Presidential Directive 5**: To prevent, prepare for, respond to, and recover from terrorist attacks, major disasters, and other emergencies, the United States Government has established a single, comprehensive approach to domestic incident management. NOAA must ensure that it works efficiently and effectively with other Federal agencies and departments. Therefore, internal coordination must take place before information is provided to the intended recipient ensuring all NOAA capabilities are provided as a whole, not piecemeal. The EMR fulfills the cross-NOAA coordination

need.

6. **Homeland Security Presidential Directive 8:** National Preparedness, Dec. 17, 2003. This directive establishes policies to strengthen the preparedness of the United States to prevent and respond to threatened or actual domestic terrorist attacks, major disasters, and other emergencies by requiring a national domestic all-hazards preparedness goal, establishing mechanisms for improved delivery of Federal preparedness assistance to State and local governments, and outlining actions to strengthen preparedness capabilities of Federal, State, and local entities.
7. **Executive Order 12656, Part 4, Section 401(9):** Designates responsibilities of Federal departments and agencies in national security emergencies. Section 401(9) lists DOC responsibilities to include: developing plans to provide meteorological, hydrologic, marine weather, geodetic, hydrographic, climatic, seismic, and oceanographic data and services to Federal, State, and local agencies.
8. **National Marine Sanctuaries Act (16 U.S.C. §§ 1431 et seq.), Sections 1432 and 1443:** Under section 1443, the Secretary may undertake or authorize all necessary actions to prevent or minimize the destruction or loss of, or injury to, sanctuary resources, or to minimize the imminent risk of such destruction, loss, or injury.
9. **Public Law 91-596, 106-181:** Federal Aviation Act (49 U.S.C. §§ 1421 et seq., inter alia) requires general aviation aircraft to carry emergency locator transmitters.
10. **Code of Federal Regulations Title 46 Subpart 25.26 and Title 14 Subpart 91.207:** Regulations that deal with carriage of emergency beacons.
11. **Code of Federal Regulations Title 47 Parts 80, 87 and 95:** Authorization by the Federal Communications Commission (FCC) to use the 406 MHz frequency for emergency beacons and which requires COSPAS-SARSAT to certify emergency beacons, NOAA to control coding of emergency beacons, and for NOAA to register emergency beacons.
12. **International Civil Aviation Organization and International Maritime Organization:** Annexes 6, 10 and 12 to the Convention on International Civil Aviation requires carriage and registration of 406 MHz emergency beacons. IMO Assembly Resolutions A.662(16), A.694(17), A.696(17), A.810(19), and A.887(21) deal with carriage requirements, standards, type approval and registration of emergency beacons used in the Global Maritime Distress and Safety System. U.S. aircraft and ships that fall under these conventions are required to carry and register emergency beacons.
13. **Chapter X1-2** of the International Convention for the Safety of Life at Sea (SOLAS)

– Ship Security Alerting System: Chapter XI-2 requires all ships that fall under the SOLAS convention to be able to transmit a security alert in case of attack by terrorists.

14. **Coast & Geodetic Survey Act of 1947 (33 U.S.C. §§ 883 et seq.)** – Organic authority for NOS navigation services – “To provide charts and related information for the safe navigation of marine and air commerce, and to provide basic data for engineering and scientific purposes and for other commercial and industrial needs... [NOAA] is authorized to conduct the following activities: hydrographic and topographic surveys, tide and current observations, geodetic control surveys, field surveys for aeronautical charts, geomagnetic, seismological, gravity, and related geophysical measurements and investigations, and observations for the determination of variation in latitude and longitude.”
15. **NWS Organic Act (15 U.S.C. § 313)** - provides the basic authority to forecast the weather, issue storm warnings, collect and transmit marine data such as ice forecasts for the benefit of commerce and navigation.
16. **Coastal Zone Management Act (16 U.S.C. §§ 1451 et seq.)** – Among other things, authorizes NOAA to provide technical support to states to balance economic development and environmental protection along the Nation’s coasts.
17. **Magnuson-Stevens Fishery Conservation and Management Act (16 U.S.C. 1801 et seq.)**. Section 305(b)(2) of the act requires Federal agencies that authorize, fund, or conduct activities that "may adversely affect" essential fish habitat (such as port development projects) to consult with NOAA to develop measures that minimize damage to essential fish habitat.
18. **Interagency Agreement for Meteorological Services Among the Bureau of Land Management, Bureau of Indian Affairs, U.S. Fish and Wildlife Service, and National Park Service of the U. S. Dept. of Interior; the Forest Service of the U.S. Dept of Agriculture; and the NWS of the U. S. Dept. of Commerce:** sets the terms and conditions under which the NWS will to provide meteorological services to Wildland Fire Agencies.
19. **Occupational Safety and Health Standards- Hazardous waste operations and emergency response (29 CFR 1910.120).** Requires training for all employees working on sites exposed to hazardous substances, health hazards, or safety hazards.

#### **International or Interagency Cooperation**

1. **National Oil and Hazardous Substances Pollution Contingency Plan, Sec 300.175 (b)(7), Sec 300.145(c)(1-4):** Provides the organizational structure and procedures for

preparing for and responding to discharges of oil and releases of hazardous substances, pollutants, and contaminants. Names DOC (i.e. NOAA) as the lead federal trustee for ocean and coastal natural resources. Tasks NOAA to provide scientific support to the Federal On-Scene Coordinator through the Scientific Support Coordinator program.

2. **International COSPAS-SARSAT Programme Agreement:** International, intergovernmental agreement that ensures the long-term operation of the COSPAS-SARSAT system on a non-discriminatory basis to support the objectives of the International Civil Aviation Organization (ICAO) and the International Maritime Organization (IMO).
3. **Memorandum of Agreement Concerning the SARSAT Space Segment:** Intergovernmental agreement addressing how the SARSAT Space Segment is to be implemented among Canada, France and the United States.
4. **Memorandum of Understanding Regarding Responsibilities for the United States COSPAS-SARSAT System:** Interagency agreement addressing the management and operation of the U.S. COSPAS-SARSAT System.
5. **United States National Search and Rescue Plan:** Interdepartmental agreement which provides for a Federal-level committee to coordinate civil search and rescue, and which requires the Department of Commerce, through NOAA, to provide satellite services for emergency beacons.
6. **U.S. Commission on Ocean Policy Report (USCOP September 2004):** Requires NOAA to support DOT in incorporating emergency preparedness requirements in developing a national freight transportation strategy.
7. **Marine Mammal Protection Act of 1972 (16 U.S.C. §§ 1361 et seq.):** Under the Marine Mammal Protection Act of 1972, NOAA has responsibility for ensuring the protection of cetaceans (whales, porpoises, and dolphins) and pinnipeds (seals and sea lions), except walruses. USFWS is responsible for ensuring the protection of walruses, sea otters, polar bears, and manatees. NOAA and USFWS are required to consult with the Marine Mammal Commission, also created by the MMPA. With several exceptions, the MMPA establishes a moratorium on the taking and importation of marine mammals and marine mammal products.
8. **The Abandoned Shipwreck Act of 1987:** (43 U.S.C. §§ 2101 et seq.) vests title to certain abandoned shipwrecks in state submerged lands to the federal government which, with certain exceptions, immediately transfers ownership to the state whose submerged lands contain the shipwreck. States are encouraged to develop policies to allow for public and private sector recovery of shipwrecks consistent with the

protection of historical values and environmental integrity and with guidelines issued by the Secretary of the Interior.

9. **Act to Prevent Pollution from Ships:** (APPS; 33 U.S.C. §§ 1901 *et seq.*). Together with subsequent amendments, APPS prohibits the discharge of oil and noxious liquids and the disposal of various types of garbage in offshore waters consistent with the International Convention for the Prevention of Pollution from Ships (known as MARPOL).

Requirements vary based on the form of the material and the vessel's location and distance from shore. The law applies to all ships, whether U.S. or foreign flag, that are subject to U.S. jurisdiction.

10. **Endangered Species Act:** The Endangered Species Act of 1973 (ESA; 16 U.S.C. §§ 1531 *et seq.*) protects species of plants and animals listed as threatened or endangered. NOAA or USFWS determine the species that are endangered or threatened and are directed to designate critical habitat and develop and implement recovery plans for threatened and endangered species. Once a species is listed, federal agencies must ensure that any action they authorize, fund, or carry out is not likely to jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of their critical habitat.
11. **National Invasive Species Act of 1996:** The National Invasive Species Act of 1996 (Pub. L. 104–332; 16 U.S.C. §§ 4701 *et seq.*) substantially amended the Non-indigenous Aquatic Nuisance Prevention and Control Act of 1990 (Pub. L. 101–646), which is the primary federal law dealing with aquatic invasive species and ballast water management, and is the basis for Coast Guard regulations and guidelines to prevent introductions of non-native species through the uptake and discharge of ships' ballast water.
12. **Non-indigenous Aquatic Nuisance Prevention and Control Act:** The Non-indigenous Aquatic Nuisance Prevention and Control Act of 1990 (NANPCA; Pub. L. 101–646; 16 U.S.C. §§ 4701 *et seq.*) created a broad new federal program to prevent the introduction of aquatic nuisance species and control their spread. The act established the federal interagency Aquatic Nuisance Species Task Force, whose members include USFWS, USCG, EPA, USACE, and NOAA, to develop a program of prevention, monitoring, control, and study. NANPCA was reauthorized and expanded by the National Invasive Species Act of 1996.
13. **Harmful Algal Bloom (HAB) and Hypoxia Research and Control Act (16 U.S.C. § 1451 note)** was established in 1998 to assess the ecological and economic impacts of harmful algal blooms on coastal ecosystems and to develop methods and capabilities for reducing, mitigating and controlling their impacts. This includes research to develop

HAB forecasts and the Analytical Response Team of NOS/NCCOS/CCEHBR, which responds to HAB events in the US and around the world.

14. **Coral Reef Conservation Act (16 U.S.C. §§ 6401-6409)** requires NOAA to develop a national coral reef action strategy that includes mapping, monitoring, assessment, restoration and scientific research. The Coral Reef Protection Executive Order (#13089) requires NOAA to develop and implement a comprehensive program to inventory, monitor and identify the major causes and consequences of degradation of coral reefs. This includes the Coral Health Disease Response Team and Coral Health Disease Registry within NOS/NCCOS/CCEHBR
15. **Marine Debris Research, Prevention, and Reduction Act (33 U.S.C. 1951 et seq.)** Authorizes NOAA to implement the program, including mapping, identification, and impact assessments; removal and prevention activities; research and development of alternatives to gear posing threats to the marine environment; and outreach activities.

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**Appendix B: Relationship between EMR and NOAA's Homeland Security Program**

The NOAA Emergency Response Program (EMR) is responsible for coordinating NOAA's on-scene emergency response capabilities to provide a single integrated source of scientific data, observation, prediction, and response for all emergencies threatening life, commerce, or the environment. The EMR will:

- Lead the effort to develop, maintain, and exercise a concept of operations (CONOPS) for NOAA's emergency response capabilities;
- Lead the effort to develop and maintain the NOAA Response Plan to codify the NOAA CONOPS;
- Identify and maintain an inventory of all NOAA emergency response capabilities;
- Conduct drills and exercises to ensure NOAA's capabilities are prepared to respond to any emergency;
- Conduct after action reports/debriefs to ensure lessons learned are captured and subsequent response improvements can occur;
- Conduct Incident Command System (ICS) and National Incident Management System (NIMS) awareness training;
- Conduct outreach within NOAA to ensure response capabilities are well understood;
- Provide Emergency Response Program oversight and coordination for the HAZMAT and SARSAT activities;
- Coordinate with other NOAA emergency response activities to define gaps and provide advocacy for identified needs;
- Conduct emergency response research and development;
- Coordinate with the NOAA Homeland Security Program Office (HSPO) to ensure that the activities associated with EMR can be considered an integral part of all HSPO planning, preparedness, and response activities and are readily available for homeland security incidents;
- Assist HSPO in planning and preparedness efforts for homeland security incidents, and provide direct support to the HSPO in response to all homeland security related incidents; and



- Collaborate with the HSPO to perform periodic reviews of EMR/HSPO interactions and revise protocols as needed.

The Homeland Security Program is responsible for providing coordination and communication for NOAA with DHS and other partners for homeland security and will provide DHS-directed guidance and requests to EMR when received. HSPO responsibilities also include reporting, e.g., incident status reports and situation reports, to NOAA management (Under Secretary/Deputy Under Secretary). Details of the HS Program roles and responsibilities are found within its charter.